

A Plan to Maximize Resilience to Changes in Precipitation and Extreme Weather

Precipitation in Delaware



Precipitation in
Delaware over the last
century has averaged
45 inches per year.

(Delaware Department of Natural Resources and Environmental Control. 2014)



Seasonal Precipitation Averages are fairly equal across all seasons with only minor differences in precipitation amounts.

(Delaware Department of Natural Resources and Environmental Control, 2014)



Nor'easters are the most common coastal storms in Delaware bringing strong winds, heavy precipitation, and flooding.

(NOAA National Environmental Satellite, Data, and Information Services, 2017)

Projected Precipitation Trends



Average precipitation is expected to **increase about 10% by 2100**. The number of very wet days, **2 inches or more of rainfall in 24 hours**, is also projected to increase.

(Delaware Department of Natural Resources and Environmental Control, 2014)



In the winter months average precipitation is projected to increase and will be more likely in the form of **rain rather than snow**.

(Delaware Department of Natural Resources and Environmental Control, 2014)



An increase in the **frequency and intensity of heavy precipitation events** is projected over the next century. This is **consistent with current observed trends** and the projected trends for the entire Eastern United States.

(Delaware Department of Natural Resources and Environmental Control, 2014)







Agriculture

- Field conditions
- Crop and livestock health



Human Health

- Mold and disease
- Emergency response



Water Resources

- Drinking water systems
- Sewer and stormwater systems



Infrastructure

- Roads, culverts, and bridges
- Dams, levees, and water control structures



Natural Resources

- Beaches and dunes
- Coastal and riparian habitats

Building Resilience

The state of Delaware is exploring actions that they can take to help the state adapt to climate change. The items below represent the seven main areas where actions can be taken to help the state build resilience to precipitation changes and extreme weather.



Regulation and/or Policy

changes that address protection and conservation of vulnerable and impacted resources.



Facility and Infrastructure Design and Management

that accounts for future climate conditions and sea level rise.



Administrative Processes

related to operational guidelines and documents on how Agencies do business.



Management Plans for

natural resources, emergency response, state facilities, and Agency equipment.



Research and Monitoring

that studies the impacts of climate change and methods of adapting.



Support for Communities and Stakeholders in the

form of trainings, resources, and technical assistance.



Outreach to stakeholders and the public on climate change impacts and adaptation.

